

What is claimed is:

[Claim 1] An automotive seat assembly comprising:

a seat base;

a seatback including an upper seatback surface;

a head restraint assembly mounted to said seatback and defining a head restraint protrusion distance above said upper seatback surface, said head restraint assembly movable between a head restraint operational position and a head restraint stowed position, said head restraint stowed position reducing said head restraint protrusion distance;

an armrest assembly mounted to said seatback, said armrest assembly movable between an armrest stowed position and an armrest deployed position, said armrest assembly in communication with said head restraint assembly such that said head restraint assembly is moved between said head restraint stowed position and said head restraint operational position in response to said armrest assembly moving between said armrest deployed position and said armrest stowed position.

[Claim 2] An automotive seat assembly as described in claim 1, wherein said armrest assembly includes a non-actuating motion range allowing partial movement of said armrest assembly without moving said head restraint assembly.

[Claim 3] An automotive seat assembly as described in claim 1, further comprising:

a head restraint support member protruding from said upper seatback surface, said head restraint support member retracting into said seatback when said head restraint assembly is moved into said head restraint stowed position.

[Claim 4] An automotive seat assembly as described in claim 1, wherein said head restraint assembly comprises:

a head restraint support member protruding from said upper seatback surface; and

a head restraint inner structure rotatably mounted to said head restraint support member, said head restraint inner structure rotatable between a flip-up position and a flip-down position, said flip-down position corresponding to said head restraint stowed position.

[Claim 5] An automotive seat assembly as described in claim 1, further comprising:

at least one vertical adjustment mount in communication with said head restraint assembly.

[Claim 6] An automotive seat assembly as described in claim 1, wherein said head restraint assembly is automatically moved to said head restraint stowed position in response to said armrest assembly moving into said armrest deployed position.

[Claim 7] An automotive seat assembly as described in claim 1, further comprising:

a trigger element holding said head restraint assembly in said head restraint operation position, said head restraint assembly biased towards said head restraint stowed position; and

a link element between said armrest assembly and said trigger element, said link element releasing said trigger element when said armrest assembly is moved into said armrest deployed position.

[Claim 8] An automotive seat assembly as described in claim 1, further comprising:

a link assembly providing communication between said armrest assembly and said head restraint assembly, said link assembly comprising:

a pivot mount including a rotational slot guide, said armrest assembly pivotably mounted to said pivot mount;

an armrest link mounted to said armrest assembly, said armrest link positioned within said rotational slot guide;

a pivot arm rotational mounted to said pivot mount, said pivot arm including an armrest end and a head restraint end, said armrest link in communication with said armrest end;

a head restraint link providing communication between said head restraint assembly and said head restraint end;

wherein when said armrest assembly is rotated into said armrest deployed position, said pivot arm is rotated such that said head restraint link is pulled downwards towards said seatbase.

[Claim 9] An automotive head restraint assembly as described in claim 1, further comprising:

a link assembly providing communication between said armrest assembly and said head restraint assembly, said link assembly providing communication such that as said armrest assembly is rotated into said armrest deployed position said head restraint assembly is pulled downwards towards said seatbase.

[Claim 10] An automotive seat assembly comprising:

a left rear seat portion including a left rear seat base and a left rear seatback;

a right rear seat portion including a right rear seat base and a right rear seatback;

a center rear seat portion including a center rear seat base and a center rear seatback, said center rear seatback including an upper seatback surface and defining a right rear seatback plane;

a head restraint assembly mounted to said center rear seatback and defining a head restraint protrusion distance above said upper seatback surface, said head restraint assembly movable between a head restraint operational position and a head

restraint stowed position, said head restraint stowed position reducing said head restraint protrusion distance;

a convenience feature assembly formed within said center rear seatback, said convenience feature assembly movable between an convenience feature stowed position and an convenience feature deployed position, said convenience feature assembly in communication with said head restraint assembly such that said head restraint assembly is moved between said head restraint stowed position and said head restraint operational position in response to said convenience feature assembly moving between said convenience feature deployed position and said convenience features stowed position.

[Claim 11] An automotive seat assembly as described in claim 10, wherein said convenience feature assembly comprises an armrest assembly.

[Claim 12] An automotive seat assembly as described in claim 10, further comprising:

a head restraint support member protruding from said upper seatback surface, said head restraint support member retracting into said center rear seatback when said head restraint assembly is moved into said head restraint stowed position.

[Claim 13] An automotive seat assembly as described in claim 10, wherein said head restraint assembly comprises:

a head restraint support member protruding from said upper seatback surface; and

a head restraint inner structure rotatably mounted to said head restraint support member, said head restraint inner structure rotatable between a flip-up position and a flip-down position, said flip-down position corresponding to said head restraint stowed position.

[Claim 14] An automotive seat assembly as described in claim 10, wherein said head restraint assembly is automatically moved into said head restraint operational position in response to said convenience feature assembly moving into said armrest stowed position.

[Claim 15] An automotive seat assembly as described in claim 10, further comprising:

a trigger element holding said head restraint assembly in said head restraint operation position, said head restraint assembly biased towards said head restraint stowed position; and

a link element between said convenience feature assembly and said trigger element, said link element releasing said trigger element when said convenience feature assembly is moved into said convenience feature deployed position.

[Claim 16] An automotive seat assembly as described in claim 10, further comprising:

a link assembly providing communication between said convenience feature assembly and said head restraint assembly, said link assembly comprising:
a pivot mount including a rotational slot guide, said convenience feature assembly pivotably mounted to said pivot mount;
an convenience feature link mounted to said convenience feature assembly, said convenience feature link positioned within said rotational slot guide;
a pivot arm rotational mounted to said pivot mount, said pivot arm including an convenience feature end and a head restraint end, said convenience feature link in communication with said convenience feature end;
a head restraint link providing communication between said head restraint assembly and said head restraint end;
wherein when said convenience feature assembly is rotated into said convenience feature deployed position, said pivot arm is rotated such that said head restraint link is pulled downwards towards said seatbase.

[Claim 17] A method of reducing visibility impairment from a head restraint assembly comprising:

mounting a convenience feature assembly to a seatback portion of a seat assembly, said convenience feature assembly movable between an convenience feature stowed position and an convenience feature deployed position, said seatback portion unoccupiable when said convenience feature is in said convenience feature deployed position;

placing a head restraint assembly in communication with said convenience feature assembly, said head restraint assembly defining a head restraint protrusion distance above an upper seatback surface of said seatback portion, said head restraint assembly movable between a head restraint operational position and a head restraint stowed position, said head restraint stowed position reducing said head restraint protrusion distance, said head restraint assembly moving into said head restraint stowed position in response to said convenience feature assembly moving into said convenience feature deployed position;

wherein reduction of said head restraint protrusion distance improves visibility.

[Claim 18] A method of reducing visibility impairment from a head restraint assembly as described in claim 17, wherein said convenience feature assembly comprises an armrest assembly.

[Claim 19] A method of reducing visibility impairment from a head restraint assembly as described in claim 17, further comprising:

retracting a head restraint support element into said seatback to move said head restraint assembly into said head restraint stowed position.

[Claim 20] A method of reducing visibility impairment from a head restraint assembly as described in claim 19, further comprising:

rotating a head restraint inner structure into a flip-down position in order to move said head restraint assembly into said head restraint stowed position.